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Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (currently amended) A digital imaging device comprising:

a top electrode layer;

a dielectric layer under the top electrode layer;

a sensor layer under the dielectric layer, comprising a photoconductive layer and a plurality of pixels, each pixel comprising a charge-collecting electrode;

a thin film transistor readout matrix connected to the charge-collecting electrodes; and

a variable power supply ~~set to provide~~ including a programmable controller,

wherein the variable power supply under programmed control of the programmable controller provides voltages between the top electrode layer and the readout matrix of 3.0 kV to 1.5 kV, said voltages establishing electrical fields in said sensor layer between a minimum electrical field E_0, at which a signal-to-noise ratio of the device is relatively high but the device operates below a saturation point, and a higher electrical field E, at which the signal-to-noise ratio may be lower but is at least 50%, and

said programmable controller controls said variable power supply ~~being set~~ to provide a selected voltage between 3.0 kV and 1.5 kV ~~matching~~ suitable for attaining a desired signal-to-noise ratio for a selected object being imaged with said digital imaging device.

2. (original) The digital x-ray imaging device of claim 1 wherein the variable power supply comprises a programmable power supply.